

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for pointing the beams [[(63-67)]] of an electromagnetic wind profiler comprising a stationary antenna matrix [[(61)]] with several individual antenna elements (62)]]in which method comprising the following steps:

- feeding an input signal is fed to the antenna matrix [[(61)]],
- adjusting the phase of the input signal is adjusted for each of the individual antenna elements to produce adjusted signals [[(62)]] in order to point the beam [[(63-67)]] of the profiler, and
- utilizing separate feeder lines for each beam direction are used for feeding the adjusted signals to the antenna elements [[(62)]],
characterized in that
- wherein the phase differences between the individual antenna elements [[(62)]] are controlled with hybrid coupler elements.

2. (Currently Amended) [[A]] The method in accordance with claim 1, characterized in that wherein 90°-hybrid coupler elements are used to create four beams tilted in different directions.

3. (Currently Amended) [[A]] The method in accordance with claim 1, characterized in that wherein an additional row of 180°-hybrid coupler elements are used to create the vertical a vertical beam.

4. (Currently Amended) An apparatus for pointing the beams [[(63-67)]] of an electromagnetic wind profiler comprising a stationary antenna matrix [[(61)]] with several individual antenna elements (62)]]which apparatus comprises comprising:

- means for feeding a signal to the antenna elements [[(62)]],

- means for adjusting the phase of the signal for each of the antenna elements to produce adjusted signals in order to point the beam of the electromagnetic wind profiler, differences between the individual antenna elements (62), and
- separate feeding means are used for each beam direction for feeding the adjusted signals to the antenna elements [(62)],

characterized in that

- wherein the phase controlling means are hybrid coupler elements [(3,4)]; and
- an additional row of 180°-hybrid coupler elements are used to create a vertical beam.

5. (Currently Amended) An apparatus in accordance with claim 4, characterized in that
wherein 90°-hybrid coupler elements are used to create four beams tilted in different directions.

6. (Cancelled)